Amendments To The Claims

Please cancel claims 38-44 and 46-47 without prejudice.

1. (Previously Amended) Thermal radiation emitter controller for operating a thermal radiation emitter, comprising:

a controller, connected to a power source; and

a power amplifier connected to said controller, said power source and said thermal radiation emitter,

said controller providing a pulse sequence to said power amplifier, said pulse sequence including a plurality of pulses, each said pulses heating up said thermal radiation emitter to a temperature respective of a wavelength, within the thermal radiation spectrum, said controller determining said pulse sequence according to an available power voltage level.

2. (Original) The emitter controller according to claim 1, further comprising a voltage regulator connected to said controller and to said power source, providing voltage regulated power to said controller.

3. (Original) The emitter controller according to claim 2, further comprising a voltage multiplier connected between said voltage regulator and said power source, said voltage multiplier receiving a power signal from said power source, multiplying the voltage level of said power signal by a predetermined factor and providing a voltage multiplied power signal to said voltage regulator.

4. (Original) The emitter controller according to claim 1, wherein said controller provides a power cut command to said power amplifier to cease operation of said emitter when said available power voltage level is lower than a predetermined minimal voltage level.

5. (Previously Amended) The thermal radiation emitter controller according to claim 1, further comprising an indicator connected to said controller, said power source and to said emitter, for indicating when power is provided to said thermal radiation emitter.

6. (Original) The emitter controller according to claim 5, wherein said indicator type is selected from the list consisting of:

visual; and

audible.

7. (Original) The emitter controller according to claim 1, wherein said power amplifier periodically heats said emitter.

8. (Previously Amended) Method for operating a thermal radiation emitter controller, comprising the steps of:

detecting a voltage level of a power signal to be provided to a thermal radiation emitter connected to said thermal radiation emitter controller;

determining a heating time period according to said detected voltage level, and a target heating temperature, said target heating temperature being within the thermal radiation spectrum; and

producing a pulse signal according to said heating time period, for operating an amplifier connected between said thermal radiation emitter and said thermal radiation emitter controller, at said detected voltage level.

9. (Original) The method according to claim 8, further comprising the step of determining a cooling time period according to said target heating temperature and to the characteristics of said emitter.

10. (Original) The method according to claim 9, wherein said pulse signal is further produced according to said cooling time period.

11. (Previously Amended) The method according to claim 8, further comprising the step of emitting a periodic infrared radiation according to said pulse signal.

12. (Previously Amended) The method according to claim 10, further comprising the step of emitting a periodic infrared radiation according to said pulse signal.

13. (Original) The method according to claim 8, further comprising the step of determining said target heating temperature.

14. (Previously Amended) Thermal radiation emitter system comprising:

a thermal radiation emitter;

a controller, to be connected to a power source; and

a power amplifier connected to said controller, said power source and said thermal radiation emitter,

said controller providing a pulse sequence to said power amplifier, said pulse sequence including a plurality of pulses, each said pulses heating up said thermal radiation emitter to a temperature respective of a wavelength, within the thermal radiation spectrum, said controller determining said pulse sequence according to an available power voltage level.

15. (Original) The emitter system according to claim 14, further comprising a voltage regulator connected to said controller and to said power source, providing voltage regulated power to said controller.

16. (Original) The emitter system according to claim 15, further comprising a voltage multiplier connected between said voltage regulator and said power source, said voltage multiplier receiving a power signal from said power source, multiplying the voltage level of said power signal by a predetermined factor and providing a voltage multiplied power signal to said voltage regulator.

17. (Previously Amended) The emitter system according to claim 14, wherein said controller provides a power cut command to said power amplifier to cease operation of said infrared emitter when said available power voltage level is lower than a predetermined minimal voltage level.

18. (Previously Amended) The emitter controller according to claim 14, further comprising an indicator connected to said controller, said power source and to said infrared emitter, for indicating when power is provided to said thermal radiation emitter.

19. (Original) The emitter controller according to claim 18, wherein said indicator type is selected from the list consisting of:

visual; and

audible.

20. (Original) The emitter system according to claim 14, further comprising a power source connected to said controller and to said power amplifier.

21. (Original) The emitter system according to claim 16, further comprising a power source connected to said controller, said voltage multiplier and to said power amplifier.

22. (Previously Amended) The emitter system according to claim 14, wherein said infrared emitter comprises:

a reflective base;

two conductive poles, emerging from said reflective base, electrically insulated from said reflective base;

a high emissivity wire, electrically connected between said conductive poles, emitting infrared radiation when conducting electrical current provided through said conductive poles; and

a housing,

said reflective base including a reflective surface.

23. (Previously Amended) The emitter system according to claim 22, wherein said housing further includes a window, said reflective surface directs said infrared radiation toward said window.

24. (Original) The emitter system according to claim 22, wherein said high emissivity wire is made of a filament wire.

25. (Original) The emitter system according to claim 24, wherein said filament wire is of a length in the range of 0.20 inches and 0.60 inches.

26. (Original) The emitter system according to claim 24, wherein said filament wire is of a length of 0.40 inches.

27. (Original) The emitter system according to claim 24, wherein said filament wire is of a width in the range of 0.020 inches and 0.060 inches.

28. (Original) The emitter system according to claim 24, wherein said filament wire is of a thickness in the range of 0.00020 inches and 0.00060 inches.

29. (Original) The emitter system according to claim 22, wherein said high emissivity wire forms the shape of a helix.

30. (Original) The emitter system according to claim 29, wherein said high emissivity wire has a diameter in the range of 0.003 inches and 0.030 inches.

31. (Original) The emitter system according to claim 29, wherein said helix shape of said high emissivity wire includes a plurality of windings, the number of said windings being in the range of four windings and fifty windings.

32. (Original) The emitter system according to claim 23, wherein said window is made of a transparent material.

33. (Original) The emitter system according to claim 23, wherein said window is made of a semi-transparent material.

34. (Original) The emitter system according to claim 23, wherein said window is made of a material which is transparent to mid Infrared radiation.

35. (Original) The emitter system according to claim 23, wherein said window is made of a material which is transparent to long Infrared radiation.

36. (Original) The emitter system according to claim 23, wherein said window is made of a material which is selected from the list consisting of:

germanium;

zinc;

zinc-selenide; and

silicon.

37. (Original) The emitter system according to claim 23, wherein said window comprises a lens.

38-47. (Canceled)